

UST Rule Development—Task Force Summary

March 2017

A. Containment (UDCs, Sumps, Spill Buckets) Testing

Concerns	Resolution	To Be Determined
<ol style="list-style-type: none"> 1. Lack of current technologies/ options for conducting tests—few vacuum test options, hydrostatic primarily only option; 2. Difficulty and expense to dispose hydrostatic test water; 3. Concerns of cross contamination between sites when transporting test water; 4. Potential environmental impact of petroleum contaminated test water; 5. Expense of testing and site preparation; 6. Expense of repairs in event of fail test/equipment. 	<ul style="list-style-type: none"> ➤ Allow use of low-volume hydrostatic test (4" from bottom) for systems equipped with ATGs capable of positive shutdown; ➤ Option for owners to either follow EPA testing schedule (test by 2021), <u>or</u> delay testing until 2023 and implement annual compliance inspection instead; ➤ For new UST systems installed after October 2018, defer the first test to five years (e.g., 2023); every three years thereafter. 	<ol style="list-style-type: none"> 1. No approved standard for low volume hydrostatic test (PEI rejected low level testing in RP1200) 2. Follow-up to positive shutdown (entire site cannot be shut down); need to segregate components/ dispensers 3. What will be checked in the annual compliance inspection? 4. Education to owners/operators
Iowa's Justification & Supporting Information: <ul style="list-style-type: none"> ➤ The option to delay implementation of testing will allow for testing technologies to catch up with demand; allow costs of testing to stabilize; allow for water treatment & disposal options to be developed. ➤ The option to delay implementation of testing will allow for owners and operators to financially plan for testing and equipment upgrades. ➤ Annual compliance inspections (while testing is delayed) will result in more frequent, hands-on & eyes-on check of the equipment (in total, 5 annual compliance inspections and 60 walk-through inspections will be conducted at each site during the testing delay). ➤ In Iowa, compliance inspections are conducted by third-party, DNR licensed and trained compliance inspectors. ➤ Annual compliance inspections: protocols are in place for timely identification and correction of deficiencies (failed equipment will trigger replace/repair). An FR provider conducts 65-70 percent of the compliance inspections in Iowa; failed equipment will carry the added weight of a notice of cancellation if it is not repaired or replaced within 60 days. ➤ Iowa DNR oversees licensing of UST installers and installation inspectors, and defines a strict protocol (three inspections/system testing) for installations. We believe the protocol and verified integrity of the system at installation allows for a delay in first series of tests for new installs. ➤ Iowa is aware of valid vacuum test methods (for example CT&T and Leak Detection Technologies) for sumps and spill buckets. ➤ Since implementing biennial compliance inspections, Iowa's SOC compliance rates have increased to 88%. 		

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B. Overfill Inspection

Concerns	Resolution	To Be Determined
<ol style="list-style-type: none"> 1. Inspection involves removing drop tubes, which can result in expensive repair and replacement if it cannot be removed. 2. The auto shutoff may be seize in the riser resulting in damage when removed; 3. Testable in-ground auto shutoffs have not been commercially available long enough to know the reliability and effectiveness. 4. Expense of inspection and expense of repairs in event of damaged equipment. 	<ul style="list-style-type: none"> ➤ Instead of removing drop tubes, allow use of in-ground testable devices; ➤ If drop tube cannot be removed, option to install high level overfill alarm that engages before auto shutoff; ➤ Option for owners to either follow EPA testing schedule (test by 2021), <u>or</u> delay testing until 2023 and implement annual compliance inspection instead; ➤ For new UST systems installed after October 2018, defer the first test to five years (e.g., 2023); every three years thereafter. 	<ol style="list-style-type: none"> 1. Education to owners/operators 2. What will be checked in the annual compliance inspection? 3. Functionality of in-ground testable devices.
Iowa's Justification & Supporting Information:		
<ul style="list-style-type: none"> ➤ The option to delay implementation of testing will allow for testing technologies to catch up with demand; allow costs of testing to stabilize. ➤ The option to delay implementation of testing will allow for owners and operators to financially plan for testing and equipment upgrades. ➤ Estimate \$4,500+ to replace one drop tube, spill bucket, and concrete (times # of fill ports). These components are linked together in the context of testing/ removal/ replacement. Drop tubes are removed when the spill bucket is replaced. ➤ Annual compliance inspections (while testing is delayed) will result in more frequent hands-on & eyes-on check of the equipment to prevent releases. (In total, 5 annual compliance inspections and 60 walk-through inspections will be conducted at each site under the testing delay option). ➤ In Iowa, compliance inspections are required to be conducted by DNR licensed third-party compliance inspectors only. ➤ Data provided by Rounds & Associates on overfill violations identified during biennial inspections and insurance loss inspections show that 1) deficiencies found are rarely failing devices but rather 'tampered with' devices; and 2) overfill deficiencies have steadily declined yearly, and 3) since Iowa began its third-party biennial inspection program in 2007, the number of sites with overfill deficiencies have declined. (Rounds & Associates completed nearly 17,500 inspections since 2007; of these, 141 overfill deficiencies were identified in 2007 and only 26 in 2016). ➤ UST Professionals estimate 25% to 70% of drop tubes/overfill devices removed for inspection will be damaged and will have to be replaced. 		

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C. Leak Detection Testing

Concerns	Resolution	To Be Determined
<ol style="list-style-type: none"> 1. Question the need to remove ATG probes that, by all appearances, are working; 2. Concern that removing ATG probes will cause damage to probe; 3. Lack of an approved method of leak detection when ATG probe is pulled and waiting for repair/replace; 4. Expense to replace damaged equipment when removed. 	<ul style="list-style-type: none"> ➤ Proposed rule will not require pulling probe, unless there is evidence (visual/ diagnostic) of a problem or equipment is faulty. ➤ Annual compliance inspection must include check for operability of leak detection equipment, review of leak detection records, manual check of product and water level. ➤ Monthly walkthrough will include check of leak detection records. 	<ol style="list-style-type: none"> 1. Education for owners/operators 2. What will be checked in the annual compliance inspection?
<p>Iowa's Justification & Supporting Information:</p> <ul style="list-style-type: none"> ➤ ATG probes that are hard wired will be another challenge as the wiring will need to be cut and/or new wire pulled if there is not sufficient wire remaining to reconnect the probe. ➤ ATG diagnostics are such that the ATG will indicate when a probe is not testing or a component has failed (e.g. "Probe Out.") ➤ The DNR contacted manufacturers and Iowa licensed UST professionals and heard that in most cases it is not necessary to remove probes for testing due to built-in diagnostic capabilities. ➤ UST professionals (licensed installers, testers) have indicated probes can last for up to 20 years, and rarely fail. ➤ Monthly walk-through inspections will require review of leak detection records. ➤ Manual sticking of the tank to verify the probe is accurately reporting product and water levels will be required annually. ➤ Annual compliance inspections require review of monthly records. ➤ If there is evidence of a problem or faulty equipment (e.g., unable to pass leak test in 30-day window), probes must be pulled and checked. ➤ Iowa's experience shows that leaks come from dispensers and piping connections, not tanks. ➤ 		